

ARMY GROUND RISK MANAGEMENT PUBLICATION COUNTERMEASURE

VOL 19 NO 10

<http://safety.army.mil>

OCTOBER 1998

POV update
POV FATALITIES
108
THRU AUG FY 98
81
THRU AUG FY 97



DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

Keep The Home Fires Burning . . . Safely

Although a crackling fire in the fireplace brings to mind a warm feeling and a cozy glow, it can be extremely dangerous. If unattended, it can be deadly. In less than five minutes, an entire house can be destroyed and precious lives tragically lost. It's crucial for families to know what to do in the event of a fire, but it's even more important to prevent them in the first place.

19981028 003

ARMY GROUND RISK-MANAGEMENT PUBLICATION COUNTERMEASURE

**The Official Safety Magazine for
Army Ground Risk-Management**

BG Burt S. Tackaberry

Commander/Director of Army Safety

COL John S. Warren

Deputy Commander

LTC Peter Simmons

Publishing Manager

Paula Allman

Managing Editor

Mike Wilkins

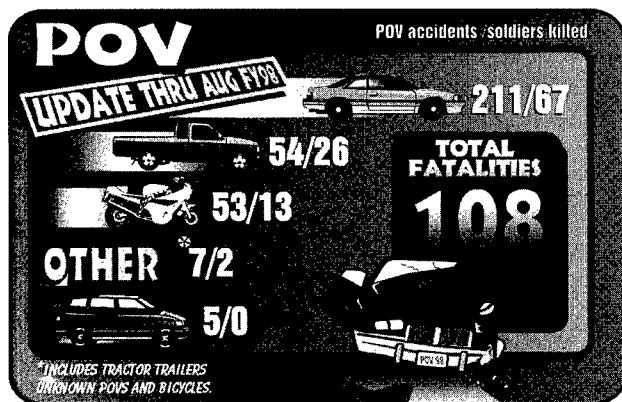
Graphics/Layout

Features

Keep The Home Fires Burning—Safely	3
ABC . . . Easy As 1-2-3	6
What You Need To Know If Your Vehicle Catches Fire	7
Safety Alert—Lithium Batteries	12

Departments

On The Home Front	4
From The Troops	6
Accident Reviews	8



Countermeasure is published monthly by the U.S. Army Safety Center, Fort Rucker, AL 36362-5363. Information is for accident prevention purposes only and is specifically prohibited for use for punitive purposes or matters of liability, litigation, or competition. Address questions about content to DSN 558-2688 (334-255-2688). To submit information for publication, use Fax 334-255-9528 (Ms. Paula Allman) or e-mail countermeasure@safety-emh1.army.mil Address questions about distribution to DSN 558-2062 (334-255-2062). Visit our website at <http://safety.army.mil>

Burt S. Tackaberry
Brigadier General, U.S. Army
Commanding Officer

Director's Corner



It's the beginning of another fiscal year, and if our past is any indication of our future, this will be an important year in safety. Why? Because accidents are still a major threat. The Army has downsized even as our missions have grown; consequently, every accident has become more expensive not only in terms of manpower and money, but also in terms of readiness.

Development of precision munitions and smart weapons has been and will continue to be responsible for a great deal of our military effectiveness. But all the technology in the world will not replace what is most important in our nation's defense—soldiers. Our ultimate smart weapon is still the individual soldier.

We have a vast wealth of talent in our Army today, which enables us to get the mission done—and done safely. Your leadership abilities help us do that. When I took command of the Safety Center a year ago, I published my bottom line leadership philosophy: Keep soldiers safe by active caring. I discussed the importance of paying attention to details, training to standards, maintaining integrity, and using common sense.

The most important factor is that leaders must get personally involved in their soldier's safety and welfare. Soldiers, not things, are important.

By the time this goes to press, I will be retired from the U.S. Army. All in all, my assignment as the Commanding General of the Safety Center has been a satisfying way to top off a 30-year career.

A look at the accident record over the past year shows tremendous improvement. The declining number of on-duty accidents indicates that safety professionals are doing their jobs well. I'd like to think that the Safety Center has helped by giving you some of the technical services and products needed to reduce accident losses.

As I approach retirement, I realize more and more what a fine group of safety professionals I've worked with over the last year. I'm going to miss the Army; I'm going to miss the Safety Center; but most of all, I'm going to miss working with you. ♦

"Mission First, Safety Always"

—BG Burt S. Tackaberry, Director of Army Safety

Keep The Home Fires Burning—Safely

According to the National Fire Protection Association, home fires cause more than 4,000 deaths and tens of thousands of injuries each year in the United States. Many of those incidents are caused from fireplaces, space heaters, and stoves.

Any fuel-burning system should be serviced by a professional at the beginning of the heating season to make sure that all systems are operating properly. The damper, vents, and chimney should be checked regularly to ensure proper operation. And always keep a fire extinguisher handy wherever there is a risk of fire. Here are some other suggestions for keeping the home fires safe.

Fireplaces

- Burn only wood. Paper or pine boughs can float out the chimney and ignite your roof or a neighboring home. Also, plastic, charcoal or styrofoam can produce toxic gases!

- Always use a sturdy screen when fireplace is in use.

- Never close the damper with hot ashes in the fireplace and be sure the fire is out before retiring for the evening.

- Follow the directions on the package if you use man-made logs. Never break a man-made log apart to quicken the fire.

Portable and other space heaters

Space heaters are used throughout the nation to increase the warmth in rooms. They do the job, but can be dangerous.

- Be sure your heater is in good working condition. All room heaters need frequent checkups and cleaning. A dirty or neglected heater is a critical fire hazard.

- Maintain adequate clearance (at least 3 feet) in all directions around space heaters.

- Never leave an operating heater unattended, especially near children and pets.

- Never dry clothes or other combustibles near heaters.

- Check electric heaters for frayed or split wires

and evidence of overheating.

Kerosene heaters

- Use only water-clear 1-K grade kerosene. The wrong fuel could burn hotter than the equipment's design limits.

- Never use gasoline. Even small amounts of gasoline or other volatile fuels or solvents mixed with kerosene can substantially increase the risk of a fire or an explosion.

- Never refuel the heater inside the home. Fill the tank outdoors, away from combustible materials, and only after the heater has been turned off and allowed to cool.

Do not fill the fuel tank above the FULL mark. The space above the FULL mark is to allow fuel expansion without causing leakage when the heater is operating. Wipe up fuel spills promptly.

- In case of a flare-up, activate the manual shut-off switch. If this does not extinguish the fire, leave the house immediately and call the fire department. Don't move the

heater or use water or a blanket to stop the fire.

- Use only in well-ventilated rooms, and open an outside window approximately an inch to permit fresh air to effectively dilute the pollutants below a level of concern.

- Always keep the wick clean and properly adjusted according to the manufacturer's instructions.

Stoves (wood and gas)

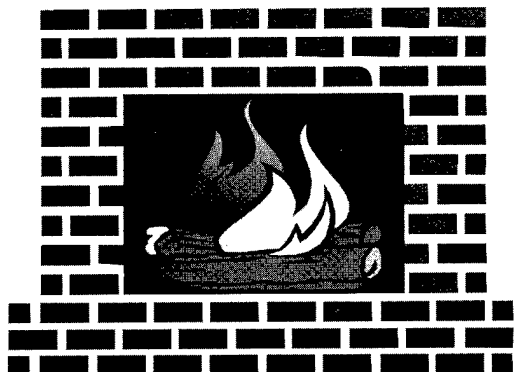
- Be sure the stove bears the label of a recognized testing laboratory and meets local fire codes.

- Follow the manufacturer's recommendations for proper installation, use, and maintenance.

- Periodically inspect and clean the chimney connections and flues.

- Never use a gas range or an oven to heat your home. Any unvented, fuel-burning appliance is capable of producing deadly levels of carbon monoxide.

- Check with local fire department and code officials before installing a wood stove. ♦



On The Home Front

Get Out and Stay Out—Your Life Depends On It!

You feel yourself waking up, but sense you're dreaming. The bedroom is dark and the air is still. Your throat is sore and it's hard to breathe. You know you left the light on in the kids' room, but you can't see it. You hear a noise, but the sound doesn't register. You ask yourself, "Am I dreaming, or is this really happening?"

As precious seconds pass, you begin to wake up. You recognize the sound of the smoke detector. The house is on fire! You jump out of bed and feel the intense heat. You remember your son's instruction from his fire-prevention class: "Crawl low in smoke, Daddy."

You get on the floor and realize Bobby was right. You shake your wife and scream, "The house is on fire! Get the kids." The room now is filled with black smoke. You need to find the doorway and get to the baby's room. Your heart beats faster, your body is covered with sweat, your eyes are burning and you're coughing. Anxiety builds. "Has the smoke already overcome the kids?" you wonder.

You jump up, run toward the doorway, and bounce off the wall. Back on the floor, your hands reach out into the blackened heat.

When you hear the baby crying, your senses take over, and you crawl toward the sound. You feel air moving and realize you're in the hallway. The sound gets louder.

Meanwhile, your wife is crying and clinging to your feet. Suddenly, you feel something; it's a wheel on the crib. You reach up and lift the baby. Down the hall, your son yells, "Mom, Dad, are you okay? Can you see the stairs?"

"Over here, Bobby," you reply. "Follow my voice." Your son asks, "Is Mom okay?"

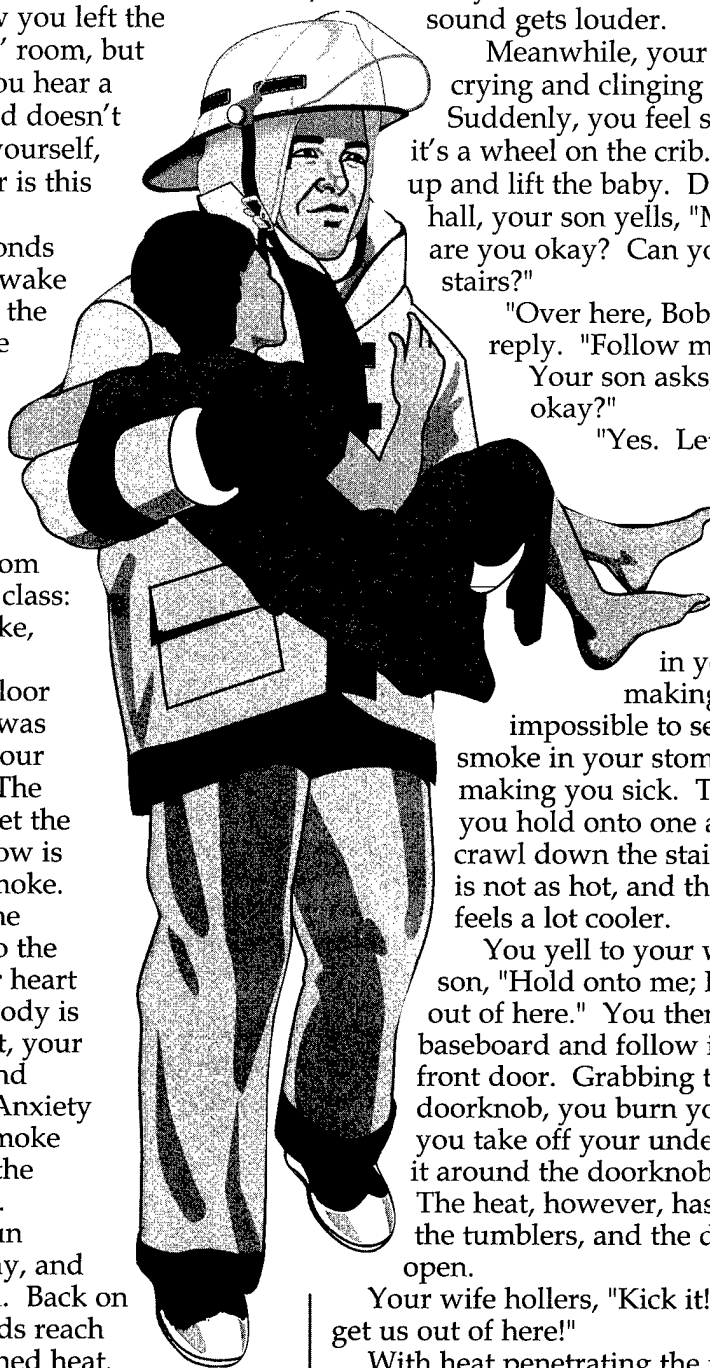
"Yes. Let's get out of the house. I have the baby." By this time, sweat is dripping in your eyes, making it

impossible to see. The smoke in your stomach is making you sick. The four of you hold onto one another and crawl down the stairs. The air is not as hot, and the tile floor feels a lot cooler.

You yell to your wife and son, "Hold onto me; I'll get us out of here." You then feel for the baseboard and follow it to the front door. Grabbing the doorknob, you burn your hand, so you take off your undershirt, wrap it around the doorknob and turn. The heat, however, has expanded the tumblers, and the door won't open.

Your wife hollers, "Kick it! Kick it and get us out of here!"

With heat penetrating the undershirt,



you grasp the doorknob as hard as you can and turn. Finally, the doorknob gives, and the door opens. "Run! Run and call the neighbors! Get help," you urge. Looking back inside, you see an orange glow coming from the kitchen.

As the family wakes up the neighbors, you remember your wallet on the coffee table. You cover your mouth with the undershirt and start back into the house. A hand grabs your shoulder and holds you back, though. "Don't go back in," your neighbor begs. "You'll never make it out alive."

Moments later, you hear sirens in the distance. About the same time, you see flames break out at the back of the house. You feel helpless, yet gratified that you got yourself and family out alive.

Unfortunately, not all fire victims are as lucky as the ones in this fictitious account. Here's another accident with a very different ending.

"The smoke detector didn't work. Someone had removed it from the ceiling, taken out the batteries, and put it in an upstairs hall closet," lamented firefighters in another incident. The victim this time was a 5-year-old girl who had taken refuge in the closet.

The fire had started at 0730. The father woke up when he heard his children screaming and smelled smoke. Searching the heat and smoke, he found his 4-year-old son and took him outside. He then returned to locate the 5-year-old daughter, but the intense heat and flames drove him back. In his retreat, he seriously injured himself.

When the firefighters went inside, they found the little girl in the closet, one place many frightened children go during a fire. They also seek refuge in dresser drawers and under beds.

This tragedy could have been prevented if the family had practiced home fire safety. The purpose of Exit Drills In The Home (EDITH) is to train family members what to do in house fires. The concept teaches everyone how to get out; it also stresses the need to stay out.

—Adapted from Safetyline

Here are Some Other Tips to Remember:

- **Install smoke detectors.** Test them monthly and change the batteries yearly in models requiring them. For added safety, consider changing batteries twice a year. When detectors are missing or don't work properly, replace them.
- **Make an escape plan.** There's no time to waste in the fear, darkness, confusion, blinding smoke, and searing heat of a home fire. Plan ahead and at least twice a year, practice your fire-safety plan. Run some of the drills in darkness. Make sure your plan includes knowing two ways out of every room, especially bedrooms.
- **Get out fast!** Don't stop to do anything. Don't stop to call the fire department. Do that from a neighbor's house. Don't try to take possessions, just leave.
- **Stay low.** Crawl low under smoke because it contains deadly gases, which rise and fill rooms from the top down. The best air will be 12 to 24 inches off the floor.
- **Close all doors.** If you get trapped, close all doors between you and the fire. Stuff the cracks around doors and cover vents to keep the smoke out. Wait at a window and signal for help (if it's dark, use a flashlight). If there's a phone in the room where you're trapped, call the fire department and tell them exactly where you are.
- **Test every door.** Before opening a door, make sure there's no fire on the other side. Kneel or crouch at the door, reach up high, and use the back of your hand to touch the door. Also touch the doorknob and the space between the door and the frame. If any of these areas feel hot, use another way out. If everything feels cool, brace your shoulder against the door and open it carefully, being ready to slam it shut if heat or smoke rushes in. As you leave, close all doors behind you, which will slow down the spread of fire and smoke.
- **Don't use elevators.** In an apartment or office building, use stairways to leave the building. Never get in an elevator during a fire; it may stop between floors or even take you to the floor where the fire is burning.

Make fire safety a habit.

From The Troops

Fires Don't Have To Happen

As a firefighter, the fires that I most hate to see when I arrive on the scene are garage fires. The reason is that you never know what things are stored there and what hazards you may encounter. Even being fire conscious, I shudder to think what might explode if my garage were to catch on fire. Every day, the average consumer uses all kinds of laborsaving chemical formulations that are hazardous. This can range from disinfectants and tile cleaners to the gasoline used for our lawn mowers. There also seems to be a trend that the onetime used "miracle space-age chemical product," somehow finds its way to that homemade shelf in the garage. It gets put below the rusty, half-full can of lighter fluid, and in between the paint thinner and that purple, smelly stuff you used to fix that sprinkler head you ran over with the lawn mower. This chemical arsenal with its by-products being stored in our garage and the disposal of these products may be one of the most serious environmental problems facing the country today. In effect, we are each maintaining and continually restocking our own chemical warehouses.

The point is that dangerous, even toxic chemicals can lead to hazardous consequences for your family if not properly stored and disposed of when their shelf life is expired. Rusty cans that contain ether can explode just by opening them. The mixture of household ammonia and chlorine bleach makes a toxic gas. Simple pool chlorine and cola give off deadly chlorine gas. Powdered chlorine and brake fluids are highly flammable. Ammonium Nitrate (fertilizer) and fuel oil make a powerful explosive. That bag of charcoal you left out in the rain and put in the garage to dry could ignite on its own. Rags improperly disposed of with oil-based products (linseed oil) can self-heat and spontaneously ignite.

Don't take for granted the danger that could be lurking in your garage. Become proactive; clean your garage of unwanted, seldom-used chemicals. This could be your first step toward cleaning the environment and making this part of your house as safe as the rest of your home. ♦

**POC: William Nowlin, Assistant Fire Chief,
Travis AFB Fire Department, DSN 837-
3886, william.nowlin@travis.af.mil**

ABC...Easy As 1-2-3

What exactly is an ABC fire extinguisher and where can I get one? Fire extinguishers are generally rated to fight specific materials. An ABC fire extinguisher can safely be used to put out almost any fire that occurs in your home, including **Class A, B, or C fires**. For example:

- **Class A** extinguishers fight ordinary combustibles such as wood, paper, cloth, and many plastics.

- **Class B** extinguishers fight most liquid combustibles such as oil, grease and gasoline, as well as tars, paints, and flammable gases.

These are suitable for most fires caused by cooking.

- **Class C** extinguishers fight electrical fires, including fires in wiring, fuse boxes, circuit breakers, and appliances.

An ABC fire extinguisher comes in a variety of sizes and from many different manufacturers. Generally, you can buy one at a hardware store, a home-improvement store, and wherever industrial fire equipment is sold. Also check with your local fire department for more information. ♦

What You Need To Know If Your Vehicle Catches Fire

When people talk about the problem of fires in the United States, they are usually referring to fires in buildings. They probably don't realize that one out of every five fires involves a motor vehicle, and that one of every eight fire fatalities occurs in motor vehicles. According to the United States Fire Administration, 600 people are killed in car fires each year and 3,800 people are injured — 1,200 of those are firefighters.

Fires in motor vehicles can produce toxic gases. Automobiles, trucks, and other motor vehicles are made of many synthetic materials that emit harmful — if not deadly — gases when they burn. A main by-product of fires is carbon monoxide, an odorless, colorless and tasteless gas that kills when present in high concentration.

A vehicle fire can generate heat upwards of 1500°F. Keep in mind that water boils at 212°F, and that most foods are cooked at temperatures less than 500°F. Flames from burning vehicles can often shoot out distances of 10 feet or more.

Parts of the vehicle can burst because of heat, shooting debris great distances. Bumpers and hatchback-door struts, two-piece tire rims, magnesium rims, drive shafts, grease seals, axles, and engine parts all can become lethal shrapnel.

Although a relatively rare happening, gas tanks of motor vehicles can rupture and spray flammable fuel, causing a serious hazard. In even more extraordinary instances, gas tanks have been known to explode. Hazardous materials such as battery acid can injure even without burning.

Vehicle fires are so dangerous that firefighters wear full protective, fire-resistant equipment and self-contained breathing apparatus. Firefighters also have the ability to quickly put out vehicle fires with large amounts of water or other extinguishing agents. You don't have these advantages, so use risk management when deciding to fight a motor vehicle fire.

Here are some of the things you should do if your vehicle catches fire:

- Get yourself and all others out of and away from the vehicle. If it is in a garage or other structure, exit immediately.

- After you are a safe distance away from the vehicle, call 911 or your local emergency telephone number and report the location and type of fire.

- Remain away from the vehicle. Do not try to go back into a burning vehicle to retrieve belongings.

- Never put yourself in danger using a fire extinguisher. If you use a fire extinguisher, only do so from a safe distance and always have a means to get away.

- Use a fire extinguisher approved for class "B" and class "C" fires.

- Do not open the hood or trunk if you suspect a fire under it. Air could rush in, enlarging the fire.

Fires in tactical vehicles can be dangerous as well. Unlike POV fires, tactical vehicle fires require an approach that is a little different.

There are a few standard procedures that should be addressed when dealing with tactical vehicle fires:

- Stop the vehicle immediately.

- Follow the egress procedures as outlined in the appropriate technical manual.

- Get the hand-held fire extinguisher before dismounting vehicle, if possible.

- Activate automatic fire suppression system, if applicable.

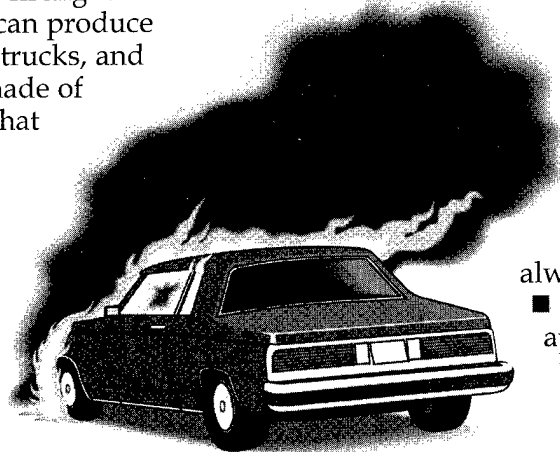
- Move a safe distance away from vehicle.

- Account for all vehicle occupants.

- Attempt to extinguish fire if possible.

Remember that the safety of personnel is the first requirement when dealing with vehicle fires. Attempts to minimize property damage should be second priority. ♦

**POC: Al Brown, Ground Systems Division,
USASC, DSN 558-2534, (334-255-2534),
brownj@safety-emh1.army.mil**



Accident Reviews

Dangerously Comfortable

Complacency is self-satisfaction accompanied by unawareness of danger. It's an attitude we develop once we get familiar—and too comfortable—with our work environment. An example of this follows:

The brigade was nearing the end of their National Training Center (NTC) rotation. Their mission for the day was a brigade live-fire deliberate attack. This mission included a breach through a complex obstacle, followed by an attack to seize the objective.

The brigade chose to use two breach lanes to get through the obstacle. On the

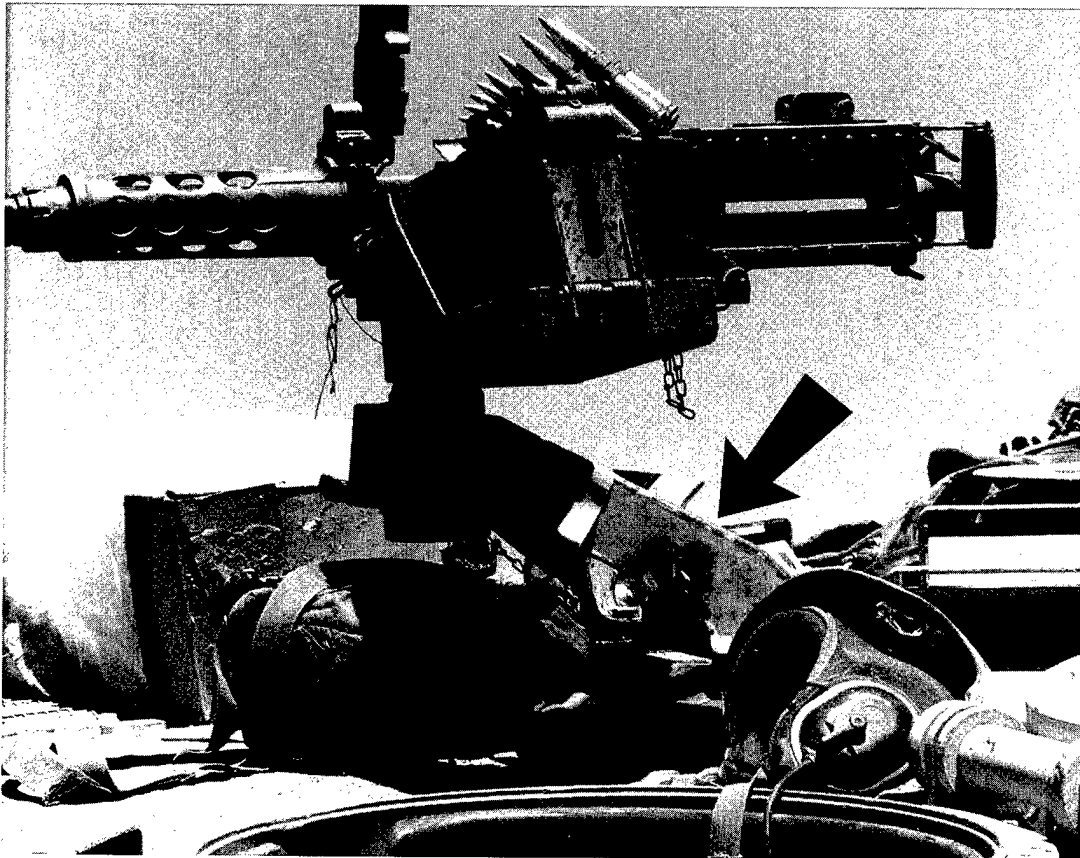
southern lane, the engineers cleared a lane using a mine clearing line charge (MICLC). After the MICLC detonation, an engineer squad moved through and marked the lane so that the follow-on maneuver units could safely pass through.

Once the lane was marked, the engineer squad in their M113 occupied a covered and concealed position just forward of the lane exit. From this position, they could observe beyond the exit and provide local security for the forces behind them.

Two mechanized infantry companies were to pass through this lane as part of the lead task force. The first company passed through without incident. As the second company passed through, one of the M2 Bradleys rounded the final turn and moved toward the exit. The

commander identified the engineer M113 to his front, and he also saw what he thought was a pop-up target down range.

The Bradley continued moving forward toward the M113. The driver identified a path to the left of the M113 and planned on going around it. The commander told his gunner of the suspected target; the gunner dropped inside the turret.



Arrow indicates point where 25mm round struck the .50 caliber machine-gun mount, the commander's periscope, and other equipment stowed on top of the vehicle. The round continued through the driver's helmet, killing him.

Thinking he had received permission to engage the target, he took his 25mm M242 Bushmaster gun off safe and fired one round.

But there was no target downrange. The Bradley had closed within approximately 100 meters of the M113, which by this time was directly on the gun-target line. The 25mm round hit the very top of the M113, striking the .50 caliber machine-gun mount, the commander's periscope, and the other equipment stowed on top of the vehicle. It also hit the driver's head, killing him. The track commander was seriously injured by shrapnel from the machine-gun mount.

After his vehicle was hit, the commander dismounted the vehicle. His arm was bleeding heavily from an arterial wound, and combat lifesavers moved him behind the vehicle to perform first aid. They did not immediately know the condition of the

driver. While the crew tended to the commander, the wounded driver lost pressure on the vehicle's brake pedal. The M113 began to move in reverse, running over one soldier's foot and causing another to fall between the tracks, with the vehicle passing directly over him. He was not injured. After moving about 150 feet backward, the remaining crewman inside the M113 jumped on top and stopped it by pulling the fuel cut-off switch.

What went wrong?

A combination of factors led to this tragic accident. Although this crew was experienced, had extensive gunnery training prior to the NTC mission, and scored "distinguished" on their last gunnery exercise, they failed to follow proper procedures. First, the Bradley commander (BC) did not properly coordinate his crew's activities. He had not used doctrinally correct fire

commands in accordance with FM 23-1 during this NTC rotation; instead, he and his gunner used an informal method of identifying and engaging targets.

A proper fire command includes several steps that ensure the proper target is engaged, and that the entire process is done safely. In accordance with FM 23-1, the elements of a fire command are:

- **Alert:** Tells the crew of an impending engagement.
- **Weapon/Ammo:** Tells the gunner which type of ammunition to use.
- **Description:** Identifies the target to the crew.

● **Direction:** Guides the gunner to the target if the BC cannot lay the turret properly.

● **Range:** Tells the gunner which range to input

● **Execution:** The command of "Fire."

● **Termination:** Ends the particular engagement.

After the description (or direction if needed), the gunner notifies

Complacency is an attitude we develop once we get familiar—and too comfortable—with our work environment.

the commander that he has positively identified the target by saying "Identified." The commander then confirms that the gun target line is clear, and that the gunner is aiming at the proper target. Only then does the commander issue the execution command "Fire."

In this situation, the commander and gunner did not use the proper sequence of commands and bypassed the built-in controls to ensure that it was safe to fire.

By using informal methods of engaging targets, the commander did not positively ensure that his gunner knew when to fire and when not to fire. There was no procedure in place for the gunner to know the commander's intent.

Finally, the M113 crew did not clear the immediate vicinity of the vehicle after dismounting. They did not check on the condition of the driver until after the M113 had unexpectedly moved in reverse. This caused additional injuries

to the soldiers treating the injured commander.

Summary

Fire commands exist for a reason. Use them whenever you are engaging a target, not just during qualification gunnery. Proper procedures include checks and balances to ensure a safe environment during engagements. A soldier was killed because a crew got too comfortable in their abilities and took shortcuts.

POC: MAJ Monroe B. Harden, Ground Systems and Accident Investigations Division, USASC, DSN 558-2919 (334-255-2919), hardenm@safety-emh1.army.mil

Heat Stress During High-Intensity Training

The 139-man, 12-mile road march was to be completed in three hours with full load carrying equipment (LCE) and weapons. This was their final stage of qualification for the Expert Infantryman Badge (EIB). Weather was expected to be hot and humid.

The route featured slopes ranging from 3 to 5 degrees on a relatively straight, loosely sanded path.

Due to anticipated high temperatures and humidity, the time of the march was moved up from 0630 to a 0330 departure time. Water points were established every $\frac{3}{4}$ mile along the route, and nine traffic control point (TCP) personnel were positioned along the course equipped with communication radios. A field litter ambulance (FLA) and two medical personnel were tasked just the night before to provide medical support for the march and therefore had not had time to rehearse a medical evacuation plan or to recon the route.

The EIB candidates had been briefed on proper hydration, rest, and sustenance. They were released the evening before and arrived for the evaluation with full-combat equipment, to include additional canteens and individual weapons.

Throughout the march, the assigned medics treated 20 candidates on-site for heat cramps and exhaustion. Seven candidates sustained heat injuries severe enough to warrant evacuation to the local medical clinic. The NCOIC for the march did not immediately learn of the names or the locations of the heat injury cases because some of the radios were

found to be inoperative, to include the FLA's. Due to the number of injuries, the sole FLA proved insufficient for evacuation purposes. In addition, TCP personnel were required to assist using other means such as privately owned vehicles



Mission: Expert Infantry Badge Qualification
12 Mile Road March
Results
■ 2 Heat Strokes
■ 1 Heat Injury
■ 20 Heat Exhaustions
Causes
Extremely High Humidity

(POVs), which happened to be at intersecting roads along the road march route.

Results

Of the seven soldiers medically evacuated, two were diagnosed as actually having suffered heat stroke requiring evacuation and intensive care unit (ICU) treatment at an appropriate medical facility. One soldier was rendered mentally and physically disabled for several days and may result in permanent, partially disabling injuries.

Sound risk management controls. This unit applied many solid risk management procedures:

■ **Adjustment of activity schedules.**

The time of the exercise was altered to avoid as much intense heat and humidity as possible.

■ **Sufficient fluid intake.** Water points were established at regular intervals to ensure water intake. Soldiers were instructed to prepare for the exercise by pre-hydrating appropriately. What may not yet be universal knowledge is that hydrating should start as much as 72 hours prior to exposure.

■ **Established control points.** Personnel manning eight control points ensured the soldiers followed the designated trail. Several of the control point personnel were combat lifesaver trained.

Shortcomings. Many controls were found to be ineffective because they were not properly implemented.

■ **Inadequate DA policies.** The appropriate study to identify the environmental heat hazards and risks associated with high-intensity training such as EIB and EFMB has not been conducted. As such, the applicable training policy has not been established for commanders to risk manage heat-exertion issues related to their training.

■ **Inadequate communication assets.** Positive communication was not established between the start/finish points and the control points along the route. The FLA's radio was also inoperative; therefore, communication was verbally relayed between control points.

■ **Insufficient medical personnel.**

Although the two medics and one FLA met the local requirement for this

exercise, they proved inadequate to attend the number of heat injuries sustained.

Summary

Given the high humidity factor and the degree of difficulty of the exercise, there was a likelihood of at least one injury that would require evacuation. Alternate or additional provisions for both evacuation and treatment are a prudent measure to be considered for future training exercises. Also, given the distance and the high OPTEMPO of the exercise, positive communication is a must in monitoring candidates' progress and status. Communication devices and methods should be checked on-site for operational status to ensure functionality and dependability. ♦

POC: LTC Pete Simmons, Chief, Ground Systems Division, USASC, DSN 558-2926 (334-255-2926), simmonsp@safety-emh1.army.mil

Note from editor: The U.S. Army Research Institute for Environmental Medicine and the U.S. Army Center for Health Promotion and Preventive Medicine have produced an updated series of charts establishing guidelines for warm weather training and work categories. Although pending validation for Army operations, the charts were featured in consonance with the article, "Reduce Hazards of Heat Injuries," in the May 1998 edition of Countermeasure and updated in the July 1998 edition.

In the May issue, Countermeasure also cites other critical control measures such as acclimatization, physical fitness, and clothing that are often contingent upon personal perseverance. Unit training is generally conducted on an escalating basis, providing for acclimatization; but soldiers must personally monitor personal fitness and general health. Fatigue, consumption of alcohol and certain medicines, and excess weight all exacerbate the incidence of heat injury. Army training, unfortunately, does not leave choice of attire to the soldier's discretion; effective training requires wear of combat uniforms and often full gear. Soldiers can ensure that uniforms worn expressly for training fit as loosely and comfortably as possible to allow for maximum ventilation.

Safety Alert

Lithium Batteries

We continue to have incidents involving lithium sulfur-dioxide batteries that have been deadlined or restricted. It looks like some folks may not have gotten the word or haven't taken it to heart. Therefore, we are again calling the recent messages to your attention. They are summarized below.

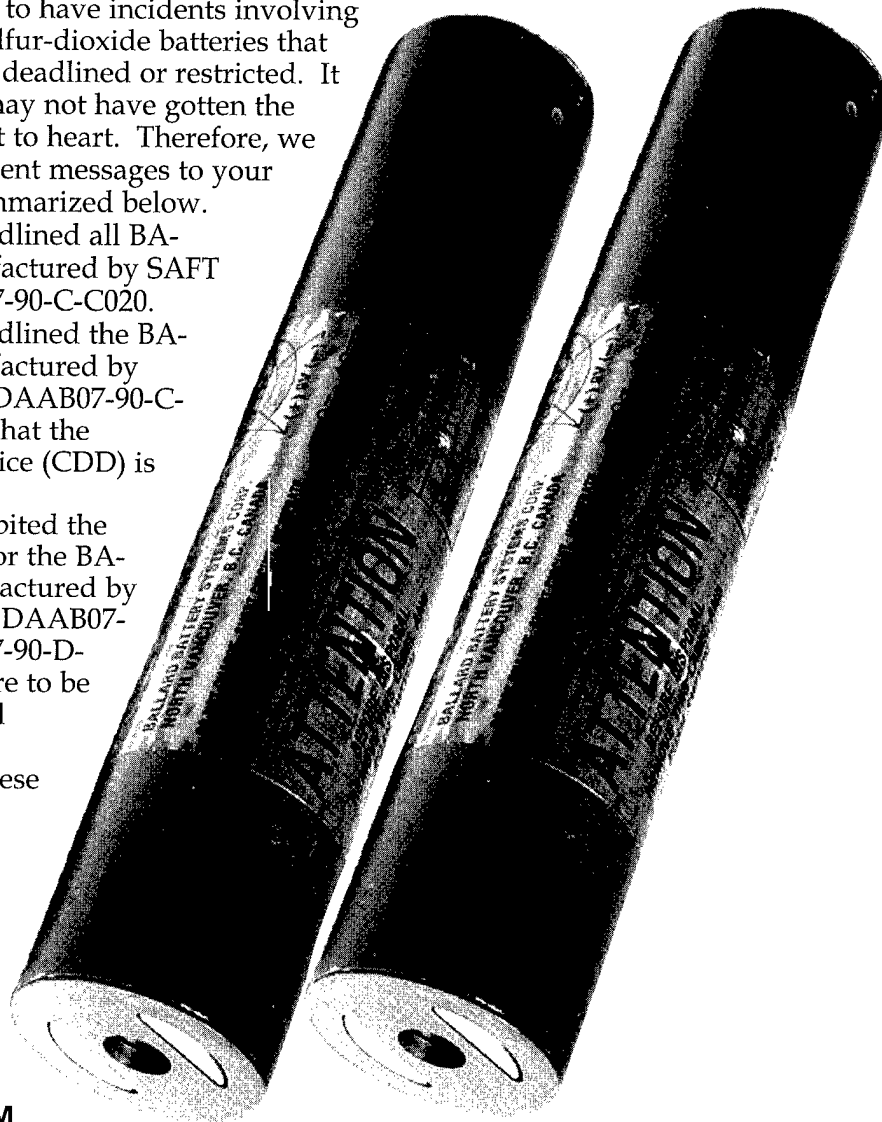
SOUM 97-017 - Deadlined all BA-5590/U batteries manufactured by SAFT under contract DAAB07-90-C-C020.

SOUM 98-001 - Deadlined the BA-5800/U batteries manufactured by Ballard under contract DAAB07-90-C-C024. It further stated that the complete discharge device (CDD) is NOT to be activated.

GPM 98-002 - Prohibited the activation of the CDD for the BA-5600/U batteries manufactured by Ballard under contracts DAAB07-90-C-C028 and DAAB07-90-D-C045. These batteries are to be disposed of as regulated waste.

If you do not have these messages, they can be downloaded from the CECOM Directorate of Safety Risk Management (DSRM) Webpage at <http://www.monmouth.army.mil/cecom/safety>

POC: Phil Klimek, CECOM
DSRM, DSN 987-3112, ext. 6437
(732-427-3112), klimek@doim6.monmouth.army.mil



WARNING

Death, serious injury, or damage to Army equipment will occur if actions specified in these messages are not implemented.